

*The Green*  
**COLONIAL**  
**FURNACE**

Since 1869 • GREEN COLONIAL FURNACE COMPANY • Des Moines, Ia.

## Are Your Fuel Bills Too High?

Is your family paying too much for fuel? Do you often wonder why the coal bin is again empty? Does anyone in your family pay strict attention to the stove, furnace, or other heaters you use? Have you ever asked your fuel dealer why he sells so many different types of fuel to you? Haven't you wished for a warm home at 7:00 a. m. when it was zero outside? Has your wife or daughter ever complained about having to shovel coal all day? Wouldn't you like to have a modern system of heating in your home, with your fuel bill cut down? Then read the first step in cutting your fuel bill, on the next page. Every statement in this interesting *heating facts* booklet is backed by over 78 years of experience, and the soundest heating engineering practice.

### Note this Statement

*Through our engineering department we learn this—the average family spends from \$15.00 to \$65.00 more each winter than they should because they have an inefficient heating plant in their home.*



---

# How to Fire Your Furnace and Cut Fuel Bills

The Green COLONIAL Furnace (Type O), installed by an authorized Green Installation Engineer (there are about 800 local Authorized Green Installation Engineers) will reduce the cost of heating your home, school, church, garage, theatre, or storeroom.

Here is the correct way to fire your Green COLONIAL Furnace (Type O) beginning at night just before you retire.

1st. See that both the check damper in the smoke pipe and draft damper in the ash pit door are closed. Open the direct draft so that the smoke may pass quickly to the chimney, not out into your face. Then open the feed door. Do not shake the grates. You do that in the morning.

2nd. In cold weather use a full charge of coal. Spread the coal over most all of the fire; just leave a little live fire to ignite the gases. This is called "banking the fire." Let it burn for a few minutes. Then with the draft regulator upstairs open the check draft in the smoke pipe.

That's all for the night.

3rd. During the night the fuel will be burned about two-thirds. When you arise, open the draft damper and close the check damper. You do this by turning the draft regulator upstairs—that's all you do.

4th. Wait about 20 minutes, then shake the furnace grates. There are four separate grates—usually it is necessary to shake only the outside grates.

After 15 or 20 minutes your home should be heated to the desired daytime temperature—and with only the coal put in the night before.

5th. At this time fire the furnace as you did at night. Let it burn for a few

minutes, then check it—close the draft damper and open the check damper—with the draft regulator upstairs.

During the day, except in extremely cold weather, it is not necessary to add fuel. If the house cools down, just open the dampers by using the draft regulator upstairs. The draft regulator may be in the dining room or any place most convenient for you.

6th. In extremely cold weather you may find it necessary to repeat the morning firing at from 5 p. m. to 7 p. m. This will keep the house warm and comfortable all evening.

*General*—Keep a thick fuel-bed in cold weather. The thickness of the fuel-bed must be varied according to the weather. It is a good plan to keep the top of the fire as nearly level with the bottom of the firing door as possible at all times, except in very mild weather. In mild or moderate weather, ashes should be allowed to accumulate on top of (not under) the grates according to the heating requirements. In cold weather, the grates should be well shaken and only a thin layer of ashes left on the grates. In other words—the thickness of the fuel-bed is to be varied, chiefly by raising and lowering the bottom and not by raising and lowering the top of the fuel-bed.

Follow the above simple rules and you may have continuous heat and all day comfort at a very large saving of fuel.

**IMPORTANT!** *Be very careful not to cover the entire fire bed with fresh fuel. Always leave a little live fire in sight when firing the furnace. Clean the ash pit daily.* Turn the page now, and you will see the latest and finest heating plant we have ever made. A fuel saver—a labor saver—and guaranteed to heat any home to 70° inside when it is 30° below outside.

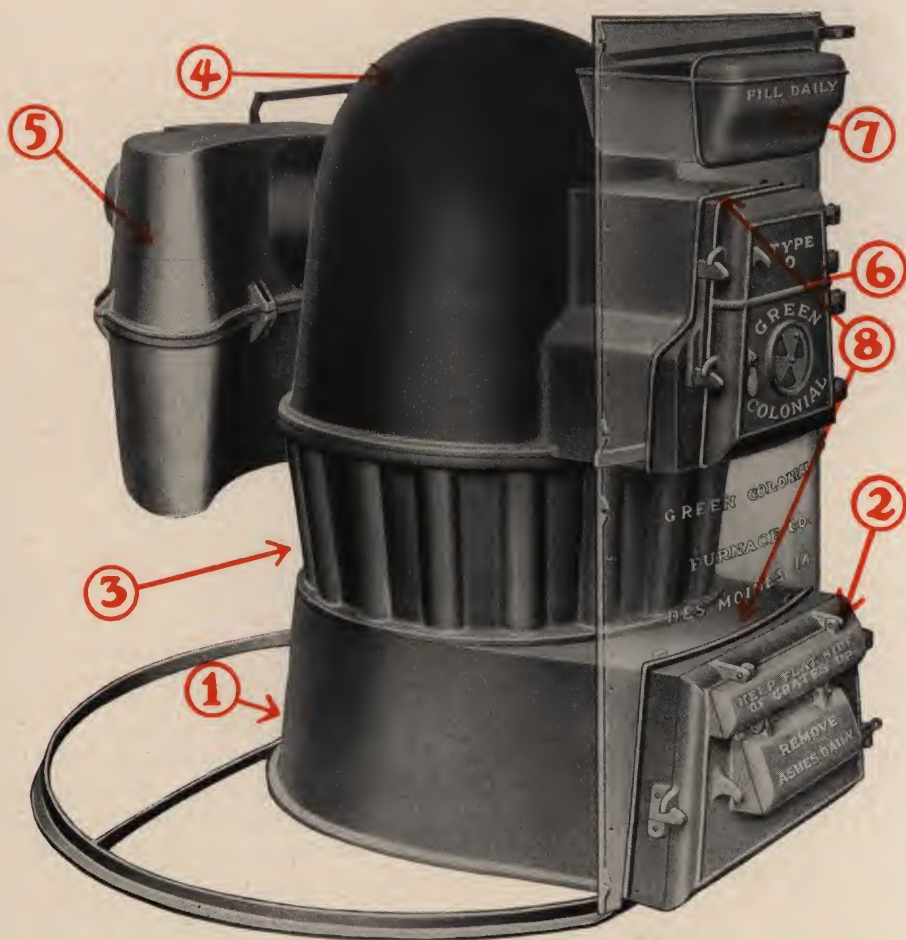
---

# The **Green** COLONIAL Furnace

Gas Tight

Grey Iron

The finest heating plant we know how to build — The result of experience since 1869



**1** Ash Pit, dust tight, with saucer-shaped base. Holds one gallon of water which aids combustion and breaks clinker forming material.

**2** Grate Bars have 3 sides, work separately—no cogs; clean fire where needed. Fuel savers.

**3** Fire Bowl—Air blast type, burns gases; heavily ribbed and reinforced top and bottom—produces more heat.

**4** Dome Heat Intensifier—Traps all gases. Walls slope over fire, gets full glow; quickest heater known.

**5** Radiator—Has down draft, forces smoke downward. Gets all heat from fuel. Direct damper, no smoke in face when firing.

**6** Big Double Doors—Takes big chunks of coal or wood—easy to see four-fifths of fire box.

**7** Humidifier — Heats quickly — easy to fill — evaporates abundant moisture for healthful heating.

**8** Jointless Connections to fire doors and ash door. Eliminates gas leakage — gives perfect control of draft.



---

## How to be an Expert Furnace Buyer

On the opposite page you see the latest in modern heating plants. Simple to install — easy to operate and guaranteed to cut your fuel bill.

Here are a few simple rules to follow when buying a furnace. They are the result of over 78 years of experience — the manufacturing of over 300,000 furnaces and the actual experiences of furnace owners, covering every type of furnace manufactured in the United States.

**RULE I.** When buying a furnace, ask for the names of five people who have used the type you are buying for at least 5 years. (A Colonial Heating Engineer can give you 5 or more in your community. The factory can give you 10,000 and more.)

**RULE II.** Always insist on getting two prices, the completely installed price, and the approximate fuel and repair cost for 5—10—20 years.

**RULE III.** Ask the dealer if he is giving you the best pipe and fittings. (We make all of our own fittings of the finest material obtainable.)

**RULE IV.** Ask the dealer if he is giving you Registers that are guaranteed not to streak your walls. The new Green Super-Air Register, when properly attached to the special Green

boxes, is guaranteed to be streakproof. One decorator's bill saved will pay the extra cost of the best registers many times over.

**RULE V.** Ask the dealer if his factory employs trained heating engineers, to inspect completed installations and assist the dealer in the planning of heating plants. (We do this.)

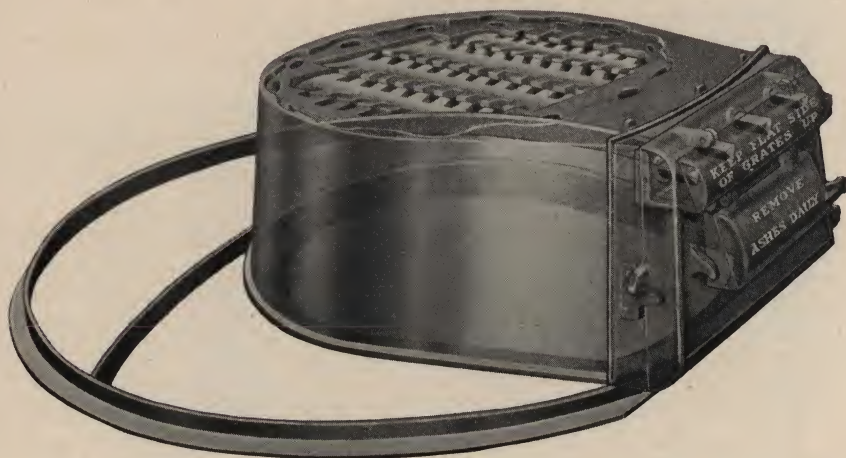
**RULE VI.** After you have heard the dealer or salesman tell his story, try to see if he is selling, or if he is discussing *your heating problem* with your comfort in mind, instead of his profit.

(Frequent schools are conducted for Green COLONIAL engineers. They know the best way to meet your installation problem, and how you can get the greatest comfort for the least money.)

**RULE VII.** Finally, remember the eight great principles of the Green COLONIAL Furnace, shown on the following pages, as you listen to the dealer or salesman. If you are satisfied that any other furnace can give you better results, buy it, but do us the favor to tell us the name of the furnace you buy. We are always anxious to find something better.

---

*Now that you have seen the COLONIAL Furnace (Type O) completely assembled let's build it from the bottom up so that you may know the reason for every part of good furnace construction.*



## Dust Tight, Saucer Type Ash Pit Base

### No. 1

As you read the following pages you will appreciate the importance of this tight fitting one-piece base. It is made of the finest gray iron, by skilled moulders. Each base is carefully inspected to be sure it was perfectly cast before delivery to you.

The base forms the bottom of the ash pit. It is two inches deep and the ash pit fits on this bottom with a double contact, sealed joint, absolutely tight. You will see later how the sheet iron casing that covers the furnace, fits on the outer edge of the base ring—and how this feature keeps dirt out

of the warm air pipes. The COLONIAL delivers only heat to your rooms. It is the thriftiest heating plant about which we know.

One more point about this scientific base. When you take out the ashes—you can pour a gallon or so of water in the ash pit—the ash dust is moistened by the water—the steam arising from the wet ashes aids combustion, and break up the clinker forming material, so that the fuel burns completely and without clinkers. Now read the next page—learn about the fuel saving grate bars.



---

# 4 Grate Bars that Save Fuel Every Day

## No. 2

"If the Green *COLONIAL* only had this one feature, it would still be the most economical furnace made." That is what hundreds of users have said.

So serious is the fuel loss in most furnaces that half a dozen different sifting devices are sold today. "Sift your ashes and save the unburned fuel." That's what the manufacturers of these sifters tell you. Fuel put in a furnace fire box should be burned, not shaken through to the ash pit.

Years ago, we adopted the use of this quartet of three sided grate bars. Many of these first sets of bars are in use today, after more than thirty years of service—tough, rugged veterans of thousands of days and nights of heavy firing.

They are made by a special process—tough beyond their actual needs. A child can operate them.

Soft coal does not burn uniformly—it melts, fuses, runs together in one part of the fire box. In another part it burns perfectly. That's the place to

shake down the ashes. Note this also—at 10° below zero you need more grate area than at 20° above. With the four grates you can "shake down" any part of the fire.

With proper firing it is not often necessary to shake the center bars all winter long. Shaking the outside bars cleans the firepot sides and allows the fire to burn around the center, yet next to the heating surface where it will give you the most heat. Each one operates separately. They can't stick. Each one is factory fitted by a trained machinist to the furnace in which they are to be used. Each one operates without cogs, or gears. Being three-sided — (note illustration), you have three sides to use. The fuel they save is enormous.

Note, too, the dust tight compartment into which the grate bars extend. You can shake your Green *COLONIAL* (Type O) Furnace grates without the slightest trace of dust escaping into your basement.

Now a word about the fire bowl.

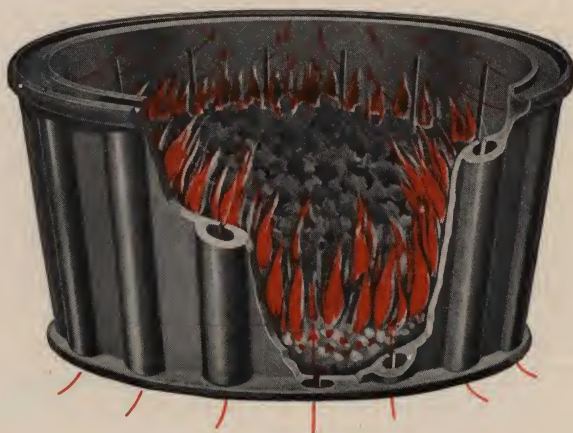
*Twenty years ago practically to the day, I installed a Green Colonial, Model No. 624, in an eight-roomed house which it has heated most satisfactorily over the period of years. I am now converting the furnace to an oil burner and thought you might be interested to know that the original grates are as nearly perfect today as they were when the installation was first made.*

*Orson Stiles, Omaha, Nebr.*

\* \* \*

*After fifteen years of renting out houses I still have my first complaint to receive from a tenant on a Green furnace. We have them in both large and small houses and know they absolutely fulfill all requirements in every particular. In the fifteen years we've had no repair expense on our COLONIALS except to replace flue pipe once. It seems to me with other furnaces we are constantly replacing cracked fire bowls or burned out grates. When one buys a Green COLONIAL they are absolutely sure of "Dependability."*

*Mrs. Lee Stebbings, Des Moines, Iowa.*



## The Smoke and Gas Consuming Air Blast Fire Bowl

### No. 3

It is unusually heavy, strongly ribbed and reinforced at both the top and bottom. It will stand the most severe firing, year after year.

The ribs on the fire bowl do three things—(a) give added strength to the bowl—(b) provide a slot for admitting pre-heated air directly over the fire—(c) increase radiating surface.

Here are the reasons why this fire bowl produces more heat for less money than any other known home heating plant.

(a) Air comes into the fire bowl from below in the ordinary furnace. In the COLONIAL Type O it comes in this way—and also through slotted ribs. These slotted ribs spread air directly over the fire, hence more heat is developed.

(b) A cubic foot of soft coal gives about 250 cubic feet of gas. If you could burn all of the gas as it is produced, you would get the last unit of heat from every pound of coal. But you must have pre-heated air through the slotted ribs to combine with the gases. It's just like the carburetor on your car — the right amount of air and fuel and you have perfect power. The COLONIAL (Type O) Air Blast Fire Bowl burns the gases, gives you this extra heat.

(c) *Note this carefully.*

Proper combustion (burning) cannot take place unless the oxygen (air) and gases come together at about the same temperature. Many so-called gas burning devices pour a stream of cold air over the fire bed only to lower the

*There is a Green Furnace in both my store at Denver and my home, and I believe that a Green Furnace properly installed is as good a furnace as can be bought.*

*In the store, I have a Green Three-Way, and have tested it several times—there's not over a degree difference in temperature from one part of the store to the other. J. W. Stumme, Denver, Ia.*



---

temperature and cause the gases to condense, lining the heating surface of the furnace with soot.

The United States Bureau of Mines reports that  $\frac{1}{8}$  inch of soot will retard the heat radiated from a metal surface 26%— $\frac{1}{4}$  inch 54%.

Many Green COLONIAL users do not find it necessary to clean their

furnace more than once in four or five years. This is the most definite proof that the COLONIAL does burn the gases.

The next part just above the fire bowl is called Green's Dome Heat Intensifier—this is explained on the next page.

\* \* \*

*I don't know much about furnace construction or the relative merits of the different kinds of furnaces. What interests me more particularly and what I want is a heating system that furnishes adequate heat with a moderate amount of fuel and a minimum amount of attention and I have these qualities in my COLONIAL.*  
Mrs. S. M. Parr, Carthage, Ill.

---

## Double Contact Sealed Connection

The accompanying illustration shows a cross-section of the expansion connection between the fire bowl and the Dome Heat Intensifier. Note the two metal - to - metal contacts or double seals with the asbestos packing locked in place and protected from the intense heat of the fuel-bed by metal. This is a permanently gas - tight connection, yet provides for free expansion and contraction of the metal without danger of cracking or warping.





## The Dome Heat Intensifier No. 4

Here's a great furnace feature, exclusively Green COLONIAL. Size for size it actually delivers more heat units to your rooms than any other furnace body of which we know. The walls slope over the fire. They get not only the direct glow of the fire, but the flame and heat from the fire-bed cover the surface completely.

The heated gases as they rise are trapped in the dome. They are completely consumed by the flame or intense heat from the fire as they move downward to pass into the radiator.

Study this improved design. See how the walls slope over the flames. The advantage here is easily proven. Just hold your hand along side of a lighted match—now tip your hand over the match. You now see the principle of the dome heat intensifier.

Remember this, heated gases rise just as warm air rises. The outlet from the Green COLONIAL Dome Heat Intensifier is in the back, several

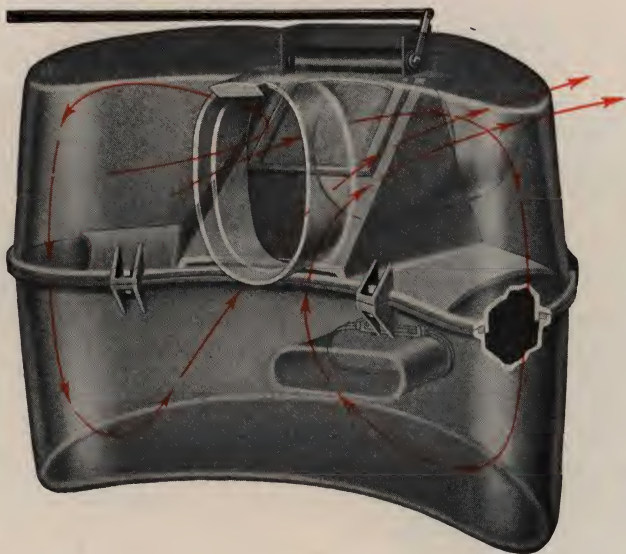
inches below the top. The gases as they rise to the top are held in suspension, until they are consumed. There's no way of escape except down through the flame or intense heat. This consumes them completely.

Check up on this fact. The first cold morning, watch the chimneys in your neighborhood. Some will be belching black smoke—full of heat-carrying un-burned gases. This is where the old saying, "Millions go up in smoke," originated, and it is literally true. Your neighbors who don't have Green COLONIAL Furnaces are heating the sky, not their homes.

Smoke from a Green COLONIAL coal fired furnace is almost invisible because practically all heat has been extracted from the fuel.

The smoke leaves the Dome and passes into the Radiator, still another Green COLONIAL Exclusive Feature—read the description on the next page.





## The Down Draft Heat Retaining Radiator

### No. 5

The purpose of the Green COLONIAL (Type O) Radiator is to extract as much heat as is mechanically possible from the smoke that would otherwise be wasted up the flue. COLONIAL Radiator design discards the old fashioned idea of being on top of the furnace and uses a distinctly new type that hangs low at the rear.

See how the Green COLONIAL Radiator extracts the heat. The heated smoke is forced to travel around the crescent shape, then downward, back around to the center, and up to the smoke outlet. Heat, you know, goes up. Green COLONIAL Radiator design forces it downward thereby retarding its flow. It cannot rush to the

chimney like in most furnaces. It is held and absorbed by the Radiator walls, the last heat unit being taken out that it is possible to extract.

Note, too, that the last of the heat travel is the coolest part of the Radiator.

There is a fine perfectly balanced direct damper in this Radiator. You open it before you open the fire doors; result, no smoke or gases puff out into your face. Every furnace should have a direct damper like this one.

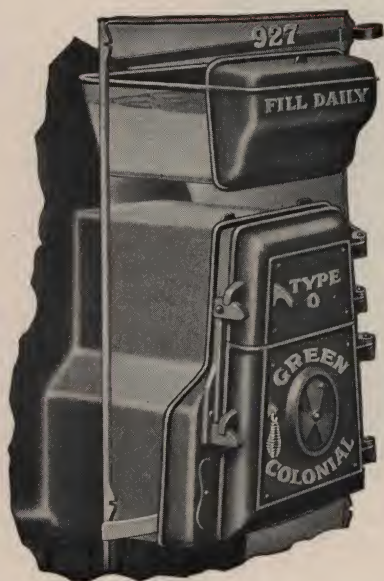
You see every feature of the Green COLONIAL (Type O) is designed for a special purpose.

The next feature of merit—the Big Double Fire Doors—see next page.

---

## The Big Double Fire Doors

### No. 6



There are two large, perfectly fitted, easily swung fire doors on the Green COLONIAL (Type O). With both doors open you can see four-fifths of the entire grate area. You always know the condition of all the fire bed. The short feed chute makes this possible. It also enables you to burn longer pieces of wood.

If you wish, you can throw a nail keg in the furnace and it won't touch the fire box opening.

You can burn large lumps of coal, chunks of wood, cobs, any kind of fuel in this furnace, and the easy way of firing makes it less than a ten-minute job each day.

See how the doors are hinged to the main body castings—not to a door frame. There's no joint here so it can never leak gas.

## Humidifier---Moist Air Maker

### No. 7

There are two kinds of heat—dry heat which is not healthful—moist or humid heat that is healthful. Most homes do not have moist heat. We supply moist heat with the Green COLONIAL. Note the way we do this.

The big Green COLONIAL Humidifier or water pan has 132 sq. in. of water surface exposed to the heated air. It is placed right over the Dome Heat intensifier. It heats quickly and gives abundance of water vapor for the largest home.

The warmed air, hungry for additional moisture absorbs this water vapor and carries it to the upper rooms, giving a healthful degree of humidity. Only with the Warm Air Heating System is this possible.

The fact that moist air as given by the Green COLONIAL Furnace (Type O), is vastly more comfortable at 68° than dry air at 72° indicates a proportionate saving in fuel cost to give you comfort and health.

Only in the last few years have health authorities interested themselves in healthful heating plants for homes.

Your doctor will tell you that warm, moist circulating air is the most healthful—that during the winter months more sickness is traceable to colds than to any other ailment.

The Green COLONIAL Furnace (Type O) gives you healthful spring-time air all winter long.



---

# The Automatic Humidifier

## Available for (Type O) Green COLONIAL Furnaces

Many furnace users forget to fill the water pan regularly — the Green COLONIAL Automatic Humidifier does this for you. It is entirely automatic.

It is connected direct to the city water or any other water pressure supply. It keeps the water level in the Humidifier or water pan constant at all times.

On page 10 of this booklet was described the big Green COLONIAL Water Pan with its one hundred thirty-two square inches of water surface exposed to the heated air and radiant heat of the Dome Heat Intensifier.

When kept filled, either by hand or by the use of an Automatic Control, it automatically supplies moisture to make the air in your home healthful.

As the temperature in the furnace rises there is a corresponding increase in the amount of moisture given off by the Humidifier. Thus, a healthful degree of humidity can be maintained under all weather conditions.

*Why is artificial evaporation necessary in the winter season?* Air at zero will hold only one-half grain of water per cubic foot. At 70° it will hold eight grains or sixteen times as much as it will hold at zero. Unless the needed moisture is supplied, the air becomes very dry. It absorbs moisture from the things in the room, furniture, pianos, plants, etc., causing serious damage. Dry air also absorbs much needed moisture from our own bodies. It is especially injurious to

the lungs and tissues of the nose and throat.

Medical authorities agree that dry air is injurious, causing colds and other respiratory ailments. A great many of our new hospitals provide a portion of the building for treatment of the nose and throat. This part of the building is supplied with the correct degree of humidity. It is automatically controlled.

Dr. Ward C. Crampton, formerly Director of Physical Training in New York City public schools, and international authority on physical training and general hygiene of the body, says: "In an atmosphere such as is found in the modern apartment, the drying process would proceed to a point where it would cause death were it not for the fact that the mucous membranes of the nose and throat rebel and refuse to part with the precious fluid. But in doing so, they themselves become subject to infection."

The Green COLONIAL may be equipped with an Automatic filler that keeps a constant level of water in the pan; or, a complete Automatic Humidifier, to fit in the hood of the furnace, is easily added to the Green COLONIAL for only a slight additional charge.

While the Green COLONIAL is supplied with or without the Automatic Humidifier, its small additional cost is more than justified by the assurance it gives of healthful moist air in your home.

*Eight years ago I installed a COLONIAL Furnace to replace another furnace. The house is heated much better and with about two tons of coal less each year than it was with the old furnace.*

*The coal I use costs me always around \$10.50 per ton and in the eight years the coal saved amounts to about \$168, which has gone a long way toward paying for the furnace.*

*In another three or four years I will have saved the original cost of the furnace and I am confident it will be on the job 100%.*

*Geo. W. Bogert, Kansas City, Mo.*

---

## Three Outstanding COLONIAL Features

### Heat Making Air Blast Fire Bowl

#### Green COLONIAL Dome Heat Intensifier

#### Down Draft Heat Retaining Radiator

This is the only furnace that has these three features combined in one unit. They're automatic, fool-proof and always work.

Just as your hand would be weakened by the loss of a finger, so would the Green COLONIAL Furnace (Type O) be weakened by the loss of any of the above features.

It's the combination of these features that gives the Green COLONIAL its great power for saving fuel — gives you the most heat year after year at lowest cost.

Let us explain—

The Heat making air blast Fire Bowl supplies the oxygen (air) pre-heated to mix with the gases given off by the fuel.

The Green COLONIAL Dome Heat Intensifier, big and roomy, enables complete combustion (burning) to take place. It intensifies the heat because it actually traps the gases until they have been consumed.

The Down Draft Heat Retaining Radiator through its downward smoke travel not only further traps the gases,

but absorbs the heat from the smoke coming in contact with its walls.

Consider this homely illustration. Water goes down, seeks the lowest outlet. Heat goes up, seeks the highest outlet. Imagine the Green COLONIAL Furnace inverted, turned upside-down, and filled with water. Before flowing out, the water would fill the big Dome Heat Intensifier and Radiator completely before finding its way around the radiator outlet.

Now here's what is always going on in the Green COLONIAL, (Type O). Heat, you know, goes up. Before even the smoke can escape, it must travel through the dome — downward into the radiator — around the crescent shaped radiator to the ends — downward — and then back to the center and up to the smoke outlet before reaching the chimney. A great volume of heat is always held in suspension, against the live heating surfaces, until the most heat units it is possible to get, have been extracted and radiated into the air chamber — to find their way into your living rooms.

*I like the COLONIAL because it is economical. Economical both in First Cost and in Fuel Cost. It isn't necessary to purchase expensive fuels in order to obtain satisfactory heat. I find that our fuel bills are surprisingly low. There is also the cheap replacement of parts. Our COLONIAL has been installed for twelve years and has cost us less than 50c per year for total upkeep.*

*L. F. Haug, Shelton, Nebr.*

\* \* \*

*I believe the Gorsch family can lay claim to being the largest actual users of Green COLONIAL furnaces.*

*My father has had a Green furnace in his home for ten years and it gave such good satisfaction that when we came to pick out a furnace, it wasn't much of a trick—we wanted a Green.*

*My brothers, Will and John, both have Greens in their homes and they are well pleased with the service they have given them.*

*In the coldest weather, our home is always warm.*

*Louis Gorsch, Marengo, Iowa.*



---

# How We Supervise an Installation

We have spent over 45 years and a small fortune, training a group of traveling engineers. They see the Green COLONIAL Installation engineer in your town frequently. They assist in planning installations — they are trained to cut installation costs to the minimum but never at the expense of giving efficient heating for your home.

The Green COLONIAL Furnace (Type O) is in our opinion the most scientific heating unit made. It is the result of years of step-by-step improvements — but we long ago found that it could not give you more heat for less money unless it was correctly installed.

Thousands of homes, churches, schools, theaters, garages and stores have for years enjoyed a better heating service, because of Sound Green

COLONIAL Engineering Practice.

We guarantee good results from a Green COLONIAL (Type O) installation. On these pages are the names of home owners in many states who have known Green COLONIAL Furnaces for many years. There are thousands more.

If you are interested in a heating plant that is more economical, we suggest that you discuss the matter with a licensed Green Installation Engineer. He will, with the assistance of the Green Traveling Engineer and the Green Engineers here at the factory, give you the best advice we have to offer.

You will never regret the selection of a Green COLONIAL Furnace (Type O). It is built to give more heat, year after year, at lowest cost.

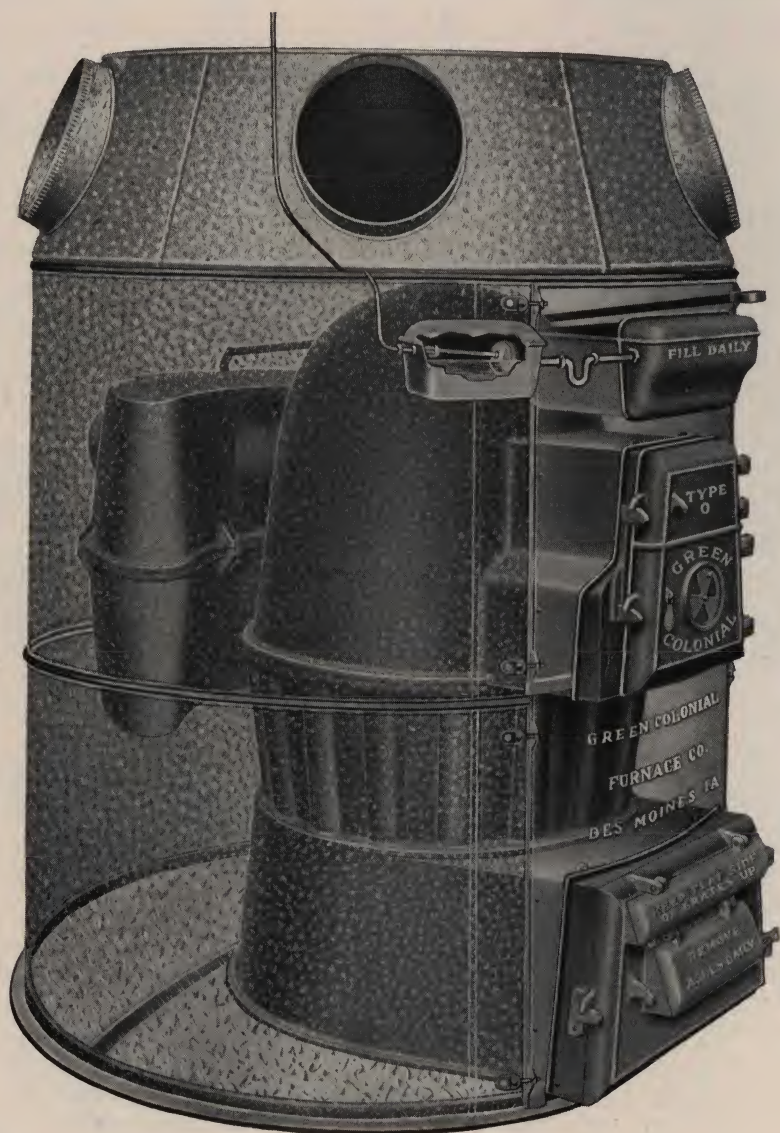
*A few of the principles for which the Green COLONIAL Heating Engineer is ever watchful are (1) the correct location of the furnace so as to equalize the Warm Air Pipes; (2) the chimney connection or smoke pipe; (3) the selection and location of streak-proof warm air registers of proper capacity; (4) the design and correct installation of the warm air pipes leading to the registers; (5) the design and capacity of wall stacks to the second floor rooms and the proper connections to the wall stacks; (6) the size and correct location of Return Air Faces so as to avoid any draught across occupied areas of your home; (7) the design, capacity and installation of Return Air Ducts with the proper connections to the furnace to assure an adequate and free circulation of air.*

*Of course each job must have its own layout for it is seldom that all the conditions in any two houses are the same. The Green COLONIAL Heating Engineer is trained and experienced in finding and providing for every condition that might effect the proper heating of your home. Feel free to ask for this service.*

\* \* \*

*In my thirty-five years experience with different makes of furnaces, I have not yet found one to come up to the Green COLONIAL for Economy and Efficiency. I have had a ——— installed five years and the cost of repairs was over \$175, besides I used 14 tons of coal to heat a seven-room house and with the COLONIAL I heat the same house with 8 tons of coal, a saving of 6 tons per year or 30 tons in five years; cost at \$7 per ton would amount to \$210 and \$175 for repairs, would make a saving of \$385 for five years. I also find that I can get more heat units out of a ton of coal with the COLONIAL than any other furnace I have used.*

*M. C. Monahan, Dixon, Ill.*



## The Green COLONIAL Pipe Furnace

Type O      Gas Tight      Grey Iron

The Style C Hood with Side Warm Air Pipe Connections Is Always  
Furnished Unless Otherwise Ordered

*An Automatic Filler may be connected to Water Pan. This may be  
added to regular Green COLONIAL Installations at slight  
additional charge*



---

## Green COLONIAL Installation as a

# Pipe Furnace

Because of popular selection and because it so fully meets the demands of modern home heating, the Standard Pipe type is the Green COLONIAL Furnace installation that enjoys the widest preference.

Here you have the most that can be offered you in home heating. All the Green COLONIAL features that represent the developments of a half century of furnace building are found in this one type.

The separate pipes conduct the heat directly to the individual rooms. This permits an abundance of even heat throughout the house. Or if at times only certain rooms need be heated, the damper in the pipes can be turned.

The return air pipes carry a constant circulation of air, make easy heating of every corner of the house possible and provide always a continuous flow of purified, healthful air.

### SPECIFICATIONS AND DIMENSIONS

#### The Green COLONIAL Pipe Furnace (Type O)

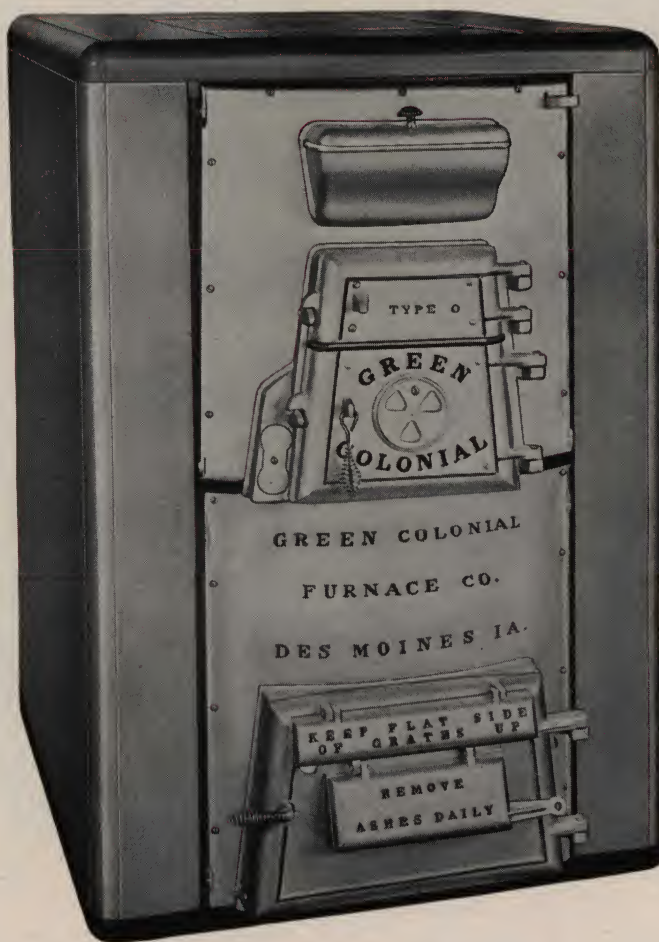
Green COLONIAL Sizes.....	921	924	927	930
Diameter of Fire Bowl, inches.....	21	24	27	30
Diameter of Casing, inches.....	42	48	54	60
Height of Feed Door, inches.....	14½	15	15	15
Width of Feed Door (Bottom), inches....	11¼	14	14	14
Height of Castings, inches.....	50	54	54	56
Size of Smoke Pipe, inches.....	9	9	10	10
Shipping Weight, pounds.....	1138	1388	1629	2004
Heating Power (Gravity), sq. in.....	500	600	750	950

The ratings of the Green COLONIAL Furnace are conservatively based on experience gained in more than 40 years of manufacturing and installing the Green COLONIAL type of furnace.

Overloaded heating plants are the ones to first require repair and replacement. Therefore, we have rated the Green COLONIAL conservatively so that well installed systems made within these ratings will assure to the home owner a long life of dependable heating service.

---

## Deluxe, Baked Enamel Cabinets For Green COLONIAL Furnaces



For the home owner who takes real pride in the appearance of his coal-fired heating system, Deluxe Cabinets are now available for all Colonial Furnaces. As shown above, these Cabinets are of modern, round-corner design and the finish is of durable baked enamel. All sizes of the Type O Green Colonial Furnace are available with this Deluxe Cabinet, at only small extra cost.



---

## Modern Forced-Air Heating With A Green COLONIAL *Super-Quiet* Blower



The Green Colonial *Super-Quiet* Blower, when added to any gravity furnace, provides a forced-air heating system at surprisingly low cost. And this blower is designed to match the Deluxe Cabinet of the Green Colonial Type O Furnace both in design and finish.

The above illustration shows the method whereby the blower is added to the Deluxe Cabinet. There are many advantages in forced-air heating and you should consider them carefully before deciding on your own system. A Green Colonial *Super-Quiet* Blower permits the use of filters, which clean most of the dirt and dust from the air. Smaller pipes may be used and installed up next to the joists where they don't interfere with basement head room.

Ask about more advantages of the Green Colonial *Super-Quiet* Blower, before you make the decision on your heating system.



## Green COLONIAL Three-Way System

Part of each Return Air Pipe is cut away so that illustration might show both



---

## New Green COLONIAL Furnace Installation as a

# Three-Way System

The pronounced feature of this type of installation is economy, since it does away with the need for separate registers for the different rooms.

Here a single register, smaller than the floor space required for a stove, is used for the heated air.

The other two registers, comparatively small in size, are for the cold air returns.

The Three-Way Green COLONIAL supplies a constant circulation of purified moist warm air throughout the house. As the warm air ascends through the warm air register, cold air descends through the two register intakes. Every bit of air in the house thus passes time and again down to the furnace and over the heated surfaces.

This, together with the evaporation of moisture in the water pan, pro-

motes a healthful condition for every member of the family.

The construction of the Three-Way Furnace is identical with that of the Pipe Furnace. It has all the important Green COLONIAL features.

*Tight Rugged One-Piece Ash Pit.*

*Fuel Saving Grate Bars.*

*Smoke and Gas Consuming Air Blast Fire Bowl.*

*Dome Heat Intensifier.*

*Down Draft Heat Retaining Radiator.*

*Big Double Fire Doors.*

*Large Humidifier (Moist Air Maker).*

### The Green COLONIAL Three-Way System

Three-Way Sizes .....	921	924	927	930
Size Warm Air Pipes, inches.....	20x30	24x30	30x30	36x36
Size W. A. Register Face, inches.....	20x30	24x30	30x30	36x36
Size Return Air Pipes (two furnished), inches .....	18	20	22	26
Sizes Return Air Faces (two furnished), inches .....	12x30	14x30	16x30	24x30

---

## Green COLONIAL Room Heater



Where only one large room is to be heated the Green COLONIAL Room Heater offers the utmost in economy and produces the greatest abundance of heat from a given amount of fuel.

The Room Heater is a desirable system in a store, garage, large hall, school room or church from the standpoint of low installation cost, since it is merely set up like a stove. No basement or connections are necessary.

For school use especially, it has been found highly satisfactory. The Big Room Heater creates a generous supply of warmed, moist air that finds its way throughout all the room. Children are kept comfortable. They escape also the dangers of colds, croup and other winter ills that are so prevalent due to exposure to cold and winter hardships.



---

## Consider These Experiences

### When You Compare Heating Plant Cost

J. M. Prussing, Rock Falls, Illinois, says: "My COLONIAL furnace was installed in 1936, and I have never needed repairs. It looks as good as the day it was installed, and has given us all the comfort and convenience we could ask for."

H. L. Davis, Ames, Iowa, reports his COLONIAL furnace, "has given wonderful satisfaction since November, 1922."

Chas. J. Lang, LaCrosse, Wisconsin, has heated his five-room home with a COLONIAL furnace since 1940. He says it is the best investment he ever made. He never uses over three tons of a good grade of coal, and his house is comfortable in the severest weather.

"I've enjoyed trouble-free COLONIAL heating since 1939—have never been without heat when I wanted it and have never had a service call," says Harry Eliassen of Clear Lake,

Iowa. "I have purchased four more of your wonderful heating plants in the last year and a half for homes I have built."

How is this for fuel economy. Wm. J. Leverett, Council Bluffs, Iowa, has been heating his 8-room house with a Green COLONIAL Furnace for 14 years on an average of 6 tons of coal per season.

Kathryn S. Burk, South Sioux City, Neb., has been using her Green COLONIAL since 1910. Her fuel cost is low and so far that has been her total furnace expense—not a dime for repairs.

In thousands of other homes the COLONIAL is giving the same lasting, dependable heating service. Your COLONIAL Heating Engineer can tell you of neighbors and friends who have wisely chosen the Green COLONIAL.

## COLONIAL Holds Fire Three Days

### Below Zero, Too!

Read what C. Leslie Johnson, General Agent, King & Hamilton Co., has to say about this Green COLONIAL holding fire.

*Green Colonial Furnace Company,  
Des Moines, Iowa,*

*Gentlemen:*

*In October, 1927, a New GREEN COLONIAL furnace was installed in my home, and I want to say that we are very well pleased with it.*

*During the cold snap last week, I had occasion to be away from home over two nights, with no one at home to take care of the fire. At 12 o'clock noon, before leaving, I put two chunks of coal into furnace, banking same with ashes (the chunks of coal were each less than 12 inches square). At 9 o'clock the third night I returned, expecting the fire to be out, and some pipes frozen, but to my surprise, there was still plenty of fire left to last another day. The time from leaving home till returning was fifty-seven hours, which is a long time to keep one fire in a furnace in extremely cold weather.*

*I can honestly recommend a COLONIAL Furnace to anyone in the market for a new heating plant, as the COLONIALS are good heaters and will hold the fire.*

*Yours truly,  
C. LESLIE JOHNSON.*

# Select The Comfort You Want

AND ADD IT TO YOUR GREEN COLONIAL FURNACE

Any Of These  
Automatic  
Equipment  
Units Can Be  
Added To Your  
Green  
COLONIAL  
Type 'O' Furnace  
— Now  
Or At Any  
Future  
Time

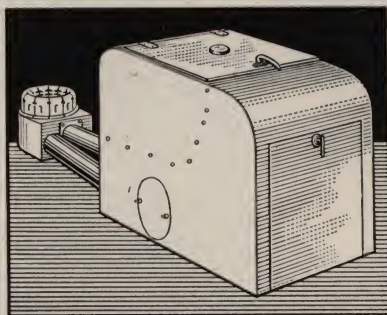
## THE GREEN COLONIAL SUPER-QUIET OIL BURNER

Converts hand-fired coal furnaces into automatic oil heating systems. A compact, foolproof and efficient oil burner, listed as standard by Underwriters Laboratories, Inc. Two sizes, for correct installation in any furnace.



## THE GREEN COLONIAL GEAR GUARD STOKER

Automatic firing for coal furnaces. Uses cheaper grades of coal. All mechanism concealed. Available in sizes for efficient firing of any coal furnace.



## GREEN COLONIAL SUPER-QUIET BLOWERS

Multi-vane type fans. Efficient and quiet. For converting any gravity heating system to forced air. Combines air-cleaning filters in one casing as shown—also available without filters. Capacities from 1,000 to 12,000 cubic feet per minute.



Many home owners buy the Green Colonial Furnace because it can be adapted so easily to oil or coal-burning automatic units. And while you may not be planning automatic equipment now, it is worth while to know that your furnace is ideally suited for such an installation when the time does come.

Adding a Green Colonial Super-Quiet Oil Burner—or a Green Colonial Stoker—or a Green Colonial Super-Quiet Blower—is not a difficult or expensive job. Further information on any of these units will gladly be furnished you now, or at any future date when you might want to install automatic equipment on your Green Colonial Furnace.



---

# The Complete Green COLONIAL Air Conditioning System

*... pays for itself in Cleaning Expense, Doctor's Calls and Fuel Bills—  
while giving you Ideal Air Conditions*

Can be installed in new homes being built, or to replace present systems. Meets every requirement for complete Air Conditioning.

(1) Warmth in Winter, (2) Correct Humidity, (3) Air Circulation, (4) Air Cleaning, (5) Automatic Heat. Installations are made according to the exact specifications drawn up by Green Colonial Heating Engineers to meet the requirements of your home. In this way you receive a custom-built job that will give you years of the most economical and satisfactory service obtainable.

THE TRAVEL OF AIR through the system is from every room of the house through scientifically located return air registers. All air enters the system at this point. Naturally, it contains dust, germs, smoke and odors. It therefore needs cleaning and renewing; in winter, the air needs to be warmed and humidified before it is forced out into the rooms through the warm air registers. This the system proceeds to do.

After the air comes down through the return air pipes, it is first drawn through the air cleaning filters which remove the dust and dirt. These filters are scientifically constructed to do a thorough cleaning job. The air is then forced by the powerful, quiet multi-blade blower into the air compartment around the furnace where it is heated. The

heating job may be done with coal, oil or gas. As the air rises, it absorbs moisture from the evaporation of water in the automatic humidifier and becomes properly humidified. The heated air is then propelled into the furnace bonnet, where it is mixed to an even temperature before being passed into the warm air pipes and thence into each room above, as clean, healthful air.

Every operation is entirely automatic. With oil, gas or stoker firing, the fire is regulated by an attractive Thermostat, located on the wall of your living room; when hand-fired coal is burned, a Thermostat opens the draft early in the morning and helps to regulate the fire during the day. The Blower is automatically operated by the Furnacestat, located on the furnace casing. Proper humidity is secured by an ample flow of water from your regular water system into the Humidifier.

In the summer time the same travel of air is obtained merely by pressing an electric switch on the wall of your living room. This sets the blower and cleaning equipment in operation, cleaning and gently circulating the air throughout the house. By opening your windows at night and letting in the cool air, and closing the windows during the heat of the day and keeping the air in circulation, you can make your home the coolest, most delightful place in the neighborhood.



## Clean Walls--Always

### With This New Streak-Proof Register

One decorator's bill will pay many times the extra cost of having the latest and finest register.

Note the beauty and efficiency of this New Register—just enough grille work to give it a Super-Air, yet allow a free, easy passage of air.

In the Metalescent Finish it gives an especially rich pleasing effect. It is far removed from the old type register with its odd shiny finish that hit

you in the eye the instant you entered a room.

The Metalescent finish is a soft neutral color, resembling satin gold, that harmonizes with most any finish wall or woodwork.

You should see this New Register and New Finish against your own walls. Your COLONIAL Installation Engineer will be glad to show it to you.

Finished in  
Metalescent

Green's  
New  
*Super-Air*  
STREAK-  
PROOF  
REGISTER

is truly a  
Beautiful Register





*Des Moines  
Model Homes*

Several years ago the first Des Moines Model Home was opened to an interested public. Thousands came to see under one roof the latest and finest in modern design, construction and furnishings.

The heating system in this first Model Home was a Green COLONIAL installation, expertly designed by a trained COLONIAL Heating Engineer, to give a maximum of comfort at a minimum of operating cost and effort.



Today this Green COLONIAL installation is performing as satisfactorily and as economically as the day it was installed—is meeting every temperature change completely and surely—is making ideal living conditions inside this home whatever the weather outside.

Since this first Model Home, more, have been built and equipped. Many times the Green COLONIAL Heating Engineering Staff has been selected to check the home and specify the exact heating installation for efficiency, economy and satisfaction.



When you select a Green COLONIAL for your home, you use the same careful judgment shown by the experts who overlooked no detail of economy and comfort in the furnishing of these model homes.





### ANOTHER GREEN COLONIAL EQUIPPED HOME

*Replying to your inquiry as to how the Green COLONIAL Furnace I have here in my home is working, would say that it is giving very excellent satisfaction. It is a well-built and well-installed heating plant. With the fan which you installed it brings about uniform circulation of heat. This adds materially to the comfort of the home both as to ventilation and heat.*

*John P. Wallace,*

\* \* \* \*

*Sac City, Iowa,*

*Green Colonial Furnace Company,  
Des Moines, Iowa,  
Gentlemen:*

*When I built my home in 1923, I put in what I supposed was a very good furnace. It worked good for awhile, then it began to gas and puffed out in my face a few times and was very hard to keep clean. In fact, it was impossible to do so. So I got mad and concluded to look for something better and finally picked on the COLONIAL and installed it in 1927.*

*This is the thirteenth winter that the COLONIAL has been in use. I have never smelled any gas, it has never puffed out in my face and I even went so far as to try and clean it out but there was nothing to clean—merely about a cup full of ash dust that would not have done any harm, even though I had not cleaned it out, in all the time that I had this furnace in use.*

*This fall I installed a Forced-Air system and this made so much improvement that I am going to get along with about a third less fuel this winter. I cannot express in words too fully what I really think of the COLONIAL and I will recommend this furnace to any who inquire of me—in fact, I have already done this and have helped make a few sales for you in this territory.*

*I couldn't help writing you this letter, for I wanted the Firm to know how well satisfied I am and my installation is open for inspection to anyone in this territory who wants to inspect my heating plant.*

*Wishing you the very best of success in the future, I remain,  
Yours very truly,*

*H. Minder.*



---

# FINALLY!

## Consider These Advantages of Green COLONIAL Moist Warm Air Circulating Heat

1. The original investment is small.
2. It is more easily understood and operated than others.
3. It begins to deliver heat immediately after the fire is started.
4. On account of its quick action, it is a wonderful convenience in early fall and late spring. An accumulation of waste paper or kindling often supplies all the heat needed for chilly mornings.
5. It responds at once to draft control, whether regulated by hand or thermostat.
6. It supplies moisture in abundance to the air in every room.
7. It provides *one* large radiating surface out of sight in the basement where it absorbs heat directly from the fuel. All space-robbing radiating surfaces upstairs are eliminated. It adds no weight to the building.
8. Gravity brings cool air down from a register in the first floor to this radiating surface where it becomes heated and humidified.
9. The heated, moistened air rises through ducts within the walls to registers that occupy no space at all within the rooms.
10. The natural fall of cool air and rise of warm, moist air creates a constant circulation of healthful atmosphere.
11. Modern methods of installation make the Green COLONIAL (Type O) unrivaled for cleanliness.
12. A Green COLONIAL Heating System is flexible. It can be operated in mild weather to give only a trace of warmth. In zero weather it can be fired to deliver a tremendous volume of heat.
13. It has nothing about it to freeze. The house may be left unheated in winter and there is not a moment's delay about starting the fire. No water system to drain—none to fill.
14. The Green COLONIAL burns any fuel — wood, soft coal, coke, hard coal or oil.
15. There being no water jacket around the fire pot to chill the fire, the fuel is burned completely.
16. It is more efficient with all types of oil burners and stokers.

Now, just sum up these advantages. Look at them carefully, remembering all the while that we are not presenting you a list of sales talks. They are proven, established facts that can be substantiated.

**You Deserve Green COLONIAL Warmth and  
Comfort. Decide Now to Have It.**

---

## Read What Satisfied Owners Say About Green COLONIAL Better Heating

Will C. Weinmann, Indianola, Iowa, writes, "I want you to know what a wonderful job our Green COLONIAL dealer did for us — we are more than pleased. I think it is the best furnace I have ever seen, and I wanted to pass the good word on to you."

Mr. and Mrs. Frank Michael of Sioux City, Iowa, report: "We like everything about our Green COLONIAL furnace, and gladly recommend it to any one as the best."

Miss Emma Petersen of Worthington, Minnesota, writes: "We have never been so comfortable before, during severe weather. We enjoy our

COLONIAL furnace immensely. It is economical, clean and very convenient."

Mr. J. R. Stephenson, Centerville, Iowa, says: "I surely enjoy my Green COLONIAL furnace. It keeps my home very comfortable every minute of the day and night. It is clean, and very economical—I would not be without it. I am glad to recommend it to any one."

H. E. Goodger, Milton, Wisconsin, says: "Our COLONIAL furnace is getting a real workout today (February, 1947), and our house is warm and comfortable. It is below zero outside and the wind is blowing a gale from the northwest."







The Home of the Green COLONIAL Furnace

## Twenty Year Guarantee

*Each New (Type O) Green COLONIAL Furnace is guaranteed to perform its rated capacity when installed with pipes of proper size according to our requirements or the requirements of the Standard Heating Code.*

*It is further guaranteed that should any part give out within twenty years from date of purchase, through a defect in material or workmanship, it will be supplied absolutely free.*

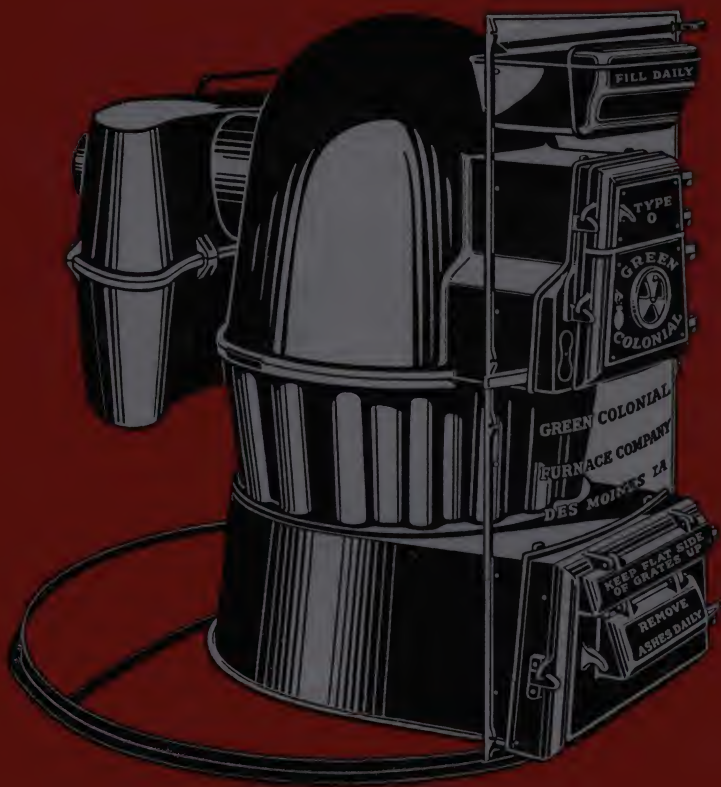
*Green COLONIAL Furnaces were first made in 1907. Practically all of them are still in use and in such condition as to indicate an average life of thirty years or more. Many older type Green Furnaces are giving satisfactory service after forty years use.*

*This, we believe, is one of the longest time guarantees placed on any furnace.*

*Green Colonial Furnace Company*

*Des Moines, Iowa*

*Serving Since 1869*



*The Green*  
**COLONIAL**  
**FURNACE**



Digitized by



ASSOCIATION  
FOR  
PRESERVATION  
TECHNOLOGY,  
INTERNATIONAL  
[www.apti.org](http://www.apti.org)

BUILDING  
TECHNOLOGY  
HERITAGE  
LIBRARY

<https://archive.org/details/buildingtechnologyheritagelibrary>

From the collection of:

Alan O'Bright